ABSTRACT

A method and apparatus for providing clock synchronization of 1394 buses having wireless devices utilizing 802.11 communication with computers attached to one or more 1394 buses, includes the steps of (a) synchronizing an internal time base of a wireless master device attached to a first bus by receiving a Software Beacon Alert that indicates a time of a subsequent transmission, applying the Software Beacon Alert to a first phase-lock loop circuit associated with the master device to create a filtered Software Beacon Alert. The first phase-lock loop circuit is unsymmetrical about zero error. A timing message is transmitted from the master device to a second phase-lock loop circuit associated with at least one slave device. The timing message must be sent to the at least one slave device before the master device receives a subsequent Software Beacon Alert message, so that the wireless master device and the at least one slave device are synchronized, even though they are on different buses. This invention allows 1394 devices having wireless means to communicate over an 802.11 WLAN network, so that communications can be synchronized between the master and slave device across 1394 serial buses.